

this in the field. Apparently these plants tolerate frost (although I have observed frost damage of some of these species after late spring frosts of great severity) or are more dependent on seasonal photoperiods than on seasonal temperatures for timing of bud-break. Additional studies of some of these species are needed to determine the influence of photoperiod on the induction and breaking of dormancy.

LITERATURE CITED

- KRIEBEL, H. B., and CHI-WU WANG. 1962. The interaction between provenance and degree of chilling in bud break of sugar maple. *Silvae Genetica* 11: 125-130.
- SALISBURY, F. B., and C. ROSS. 1969. *Plant Physiology*. Wadsworth Publishing Company, Belmont, California.

REVIEW

✓ "A TAXONOMIC REVISION OF THE GENUS *CNEMIDARIA* (CYATHEACEAE)," by Robert G. Stolze. *Fieldiana Botany* 37: 1-98. 1974.—The taxonomy of the American members of the family Cyatheaceae has been a source of frustration to botanists for over a hundred years. Only in the past few years has the group received the critical modern study it needed so badly. Tryon has provided us with an excellent treatment of the family in synoptical form. Revisionary work on the component genera has included papers by Gastony, Tryon, Riba, and Windisch. Stolze's revision of the natural group of species maintained as *Cnemidaria* by Tryon is another in this series of excellent systematic treatments. Pteridologists may now look forward to the day when the entire family will be represented in contemporary monographs of this same kind.

A close look at Stolze's revision reveals the quality of the work. The survey of preserved specimens from herbaria has been extensive. Stolze saw nearly 2000 specimens from at least 17 different herbaria, representing plants from the West Indies, Central America, and South America. Experience in the field has also played a major role in the project. Stolze has provided us with a useful guide to the collection of these giant ferns from his experience with sadly incomplete specimens in the herbaria, and happily complete plants in the field. There is a critical review of the morphology of plants in the genus, including work on the unusual anastomosing venation and porate spores. A section on evolution and geography develops the theme of geographic speciation typical of the American Cyatheaceae. The systematic treatment of the species attests to Stolze's careful attention to the elucidation of nomenclature, and the construction of manageable keys. Indices to Latin names and collections complete the study. The text is provided with illustrations in pen and ink by Richard Roesener. Stolze's definitive work on *Cnemidaria* is a useable one—as long as your material is complete!—David S. Barrington, Pringle Herbarium, Department of Botany, University of Vermont, Burlington, VT 05401.